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# TAXONOMIC STUDIES ON THE COSSONINAE OF JAPAN<sup>1)</sup>

(COLEOPTERA: CURCULIONIDAE)

## Part I<sup>2)</sup>

By MASAYASU KONISHI<sup>3)</sup>

### I. Introduction

The Cossoninae, a large subfamily of the family Curculionidae, includes approximately 1300 described species in the world. Most members of this subfamily live beneath the bark or within the wood of half-dead or dead trees, being of economic importance from the standpoints of forest entomology.

So far as my investigations go, 36 species falling in the Cossoninae have been known to occur in Japan, Saghalien and Formosa. These species have been informed by T. V. Wollaston (1873 a & b), W. Roelofs (1875), H. Kôno (1935, 1938), E. C. Zimmerman (1940 a & b, 1956, 1957), G. A. K. Marshall (1954, 1958), M. Konishi (1955 a & b, 1956 a-c, 1960), E. Voss (1956, 1957) and M. Chûjô & E. Voss (1960), etc., but no general work on this subfamily has hitherto been published. On this occasion there will be given a revision of the species of the Cossoninae, occurring in Japan, Saghalien and Formosa.

Types of the new species described in this paper are preserved in the Entomological Institute, Hokkaido University (HU), the Entomological Laboratory, Kyushu University (KU), National Science Museum (NSM), Osaka Municipal Museum of Natural History (OMM), the collections of Dr. M. Chûjô (MC), Mr. H. Ichihashi (HI), Dr. M. Inouye (MI), Dr. K. Morimoto (KM), Dr. T. Nakane (TN), Mr. A. Nobuchi (AN), Mr. M. Okabe (MO) and M. Konishi (MK).

Before going further, I wish to acknowledge my indebtedness to Prof. Emeritus T. Uchida and Prof. C. Watanabe, both of the Hokkaido University, for their kind direction in the course of my studies. I am much grateful to Prof. C. Watanabe for his kindness in reading through this manuscript. I am particularly obliged to Dr. M. Chûjô, Dr. H. Kôno and Dr. K. Morimoto for their kindness in offering their helpful advice, many invaluable specimens and the literature. Many thanks are also due to the following gentlemen who kindly offered a number of the valuable material or assisted in various ways: Mr. H. Hase-

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2) Konishi: Taxonomic studies on Cossoninae, Curculionidae, IV.

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## II. Classification

### Subfamily **Cossoninae**

Although former authors have taken somewhat different views about the definition of the Cossoninae, I am much inclined to the opinion that the Cossoninae is distinguished from any other subfamilies of the Curculionidae by the front tibia of which the inner margin always bears long and erect setae towards the apex as viewed from the outero-lateral side.

Terminology employed in this paper follows that used by previous authors, however, it should be noted that the length of the body is measured excluding the head and the rostrum; the rostrum is measured from above at the basal breadth with a few exceptions and at the length from the base to the apex excluding the mandibles; the position of the antennal insertion is measured in profile; and the prothorax and the elytra are measured from above at their greatest breadth and length.

In Japan this subfamily is represented by 5 tribes, which may be recognized by the following key. The tribes Dryophthorini and Onycholipini which are placed in the Cossoninae by some authors are omitted herein, since these should be rather placed in the subfamilies Rhynchophorinae and Onycholipinae, respectively.

#### Key to the tribes

1. Scutellum obsolete; elytra elongate-ovate, always narrowed from the posterior broadest part towards base. . . . . 2.
- Scutellum conspicuous; elytra fusiform, subparallel- or parallel-sided. . . . . 3.
2. Tarsi distinctly 5-segmented; eyes latero-ventral, close to or contiguous with fore margin of prothorax at their hind margins. . . . . Cotasterosomini.
- Tarsi 4-segmented or pseudotetramerous as usual; eyes dorso-lateral or lateral, distant from fore margin of prothorax. . . . . Cotasterini.
3. Fore coxae obviously separated; mesosternal process at least as broad as middle tibia. . . . . 4.
- Fore coxae almost quite contiguous; mesosternal process much narrower than middle tibia; mesosternum always strongly depressed below metasternum. . . . . Stereocorynini.
4. Eyes ventro-lateral, close to or contiguous with fore margin of prothorax at their lower hind corners. . . . . Himatinini.
- Eyes dorso-lateral or lateral, distant from fore margin of prothorax. . . . . Cossonini.

#### Tribe **Cotasterosomini**, n.

This tribe is here defined for the first time, being distinct by the 5-segmented tarsi together with the eyes peculiarly placed. Furthermore, the tribe Dryophthorini is only another one which has the pentamerous tarsi in the Curculionidae. At present the following unique new genus belongs to this tribe alone.

Genus *Cotasterosoma*, gen. nov.

Convex, elongate-ovate, shiny, partly incrustate.

Head much broader than long, not constricted on sides; eyes latero-ventral, coarsely faceted, depressed, elliptical, transversely placed, close to or contiguous with apical margin of prothorax at their hind margins. Rostrum elongate, marked off from head by a shallow transverse impression; scrobes oblique, well separated below. Scape stout, strongly clavate, much shorter than funicle; funicle 7-segmented, segment I as long as broad, II-VII each transverse and broader successively; club oval, densely pubescent. Prothorax without any constriction on sides, feebly biarcuate at base. Scutellum obsolete, not visible. Elytra obovate, without projecting humeri, slightly oblique towards suture, feebly constricted near apex. Femora clavate, edentate; tibiae compressed, strongly uncinata and evidently mucronate; tarsi conspicuously 5-segmented, segment III truncate at apex, IV minute but distinct, claw segment clavate as usual, claws minute, free and simple. Fore coxae narrowly separated; mesosternum slightly below level of metasternum, mesosternal process slightly broader than prosternal one; hind coxae separated for length of metasternum between middle and hind coxae. Intercoxal process of venter truncate; ventrites I and II fused, I as long as II plus III at sides, III and IV subequal in length and together shorter than V.

Type species: *Cotasterosoma omogoensis*, sp. nov.

This genus is quite distinctive from any other genera by the 5-segmented tarsi, as well as the position of the eyes.

1. *Cotasterosoma omogoensis*, sp. nov.

Black, shiny; legs dark brown; antennae, tarsi and tibial unci reddish brown; eyes yellowish brown to dark brown; punctures with greasy incrustation.

Head subconical, thrice as broad as long, impunctate, smooth and glabrous; eyes composed of 12 facets, about as broadly separated below as the greatest diameter of eye. Rostrum slightly longer than prothorax, rapidly narrowed anteriorly near base, thence subparallel-sided to apex, arcuate in lateral view; dorsum moderately punctate, the punctures finer near apex; antennae inserted slightly behind middle. Scape reaching to base of rostrum in lateral view; funicular segment II  $1\frac{1}{2}$  as long as III, III-V subequal in length, VI a little shorter than VII; club longer than broad (3:2), about as long as the preceding 5 segments together. Prothorax longer than broad (3.6:3.3), almost parallel-sided in basal  $1\frac{1}{2}$ , thence gradually narrowed to apex, apical margin subtruncate; dorsum convex, rather densely punctate, interspaces of the punctures finely alutaceous. Elytra 1.6 times as long as broad, twice as long as prothorax, not or a little broader at base than prothorax, broadest at middle, gently arcuate from base to apex, jointly rounded at apex; striae with large punctures incising irregularly margins of intervals on disc, interspaces of the punctures shallowly and narrowly impressed; intervals rather flat, with a row of sparse small punctures which are often absent, interval IX not carinate posteriorly and ending at apex of III. Tibiae each with a row of dense, stout and erect setae on basal part of outer margin of uncus; fore tibia with a row of dense, long and erect setae on apical  $\frac{2}{3}$  of inner margin; tarsal segment I about as long as II plus III, II and III subequal in length, III slightly broader than II and shallowly emarginate

above at apex, IV  $1/3$  as long as III and  $1/4$  as long as claw segment. Prosternal process about as broad as tarsal segment II; mesosternal process about twice as broad as prosternal one. Length, 1.8 mm.; breadth, 0.8 mm.

Holotype: Omogokei, Ehime-ken, 23. IX. 1954, K. Morikawa leg. (KU).

This specimen was collected from the litter by means of Berlese's apparatus.

Distribution: Japan (Shikoku).

### Tribe **Cotasterini**

This tribe is characterized principally by the obsolete scutellum in conjunction with the elytra which are always narrowed from the posterior broadest part towards the base. The following 3 genera including a new genus, occur in Japan.

#### Key to the genera

1. Opaque; eyes coarsely faceted or granulate; prosternal process less than  $1/2$  as broad as fore coxa. . . . . 2.
- Shiny; eyes finely faceted as usual; prosternal process  $1/2$  as broad as fore coxa. . . . . *Microtribus* Wollaston.
2. Head about as long as broad, with a distinct postocular constriction distant from eyes; scape exceeding hind margin of eye. . . . . *Dryotribus* Horn.
- Head much shorter than broad, without such constriction; scape not reaching to hind margin of eye. . . . . *Isodryotribus*, gen. nov.

#### Genus ***Dryotribus*** Horn

*Dryotribus* Horn, Proc. Amer. Phil. Soc., 13, p. 433, 1873.

*Thalattodora* Perkins, Fauna Hawaiiensis, II, p. 146, 1900.

*Pentacotaster* Chûjô et Voss, Mem. Fac. Liberal Arts & Education, Kagawa Univ., 2, p. 15, 1960.

#### **Syn. nov.**

Type species: *Dryotribus mimeticus* Horn, 1873.

The genus *Pentacotaster* Chûjô et Voss is a synonym of *Dryotribus* Horn, because the 2 type species are the same.

#### 1. ***Dryotribus mimeticus*** Horn (Pl. I, Fig. 1)

*Dryotribus mimeticus* Horn, Proc. Amer. Phil. Soc., 13, p. 433, 1873; LeConte & Horn, Proc. Amer. Phil. Soc., 15, p. 336, 1876; Champion, Ent. Mon. Mag., 45, pp. 103 & 123, 1909; Blatchley & Leng, Rhynchoph. N. E. Amer., p. 525, 1916; Csiki, in Junk, Col. Cat., 149, p. 114, 1936; Zimmerman, Occ. Pap. B. P. Bishop Mus., 15, p. 279, 1940; Zimmerman, Pan-Pacific Ent., 16, p. 141, 1940; Blackwelder, U. S. Nat. Mus. Bull., 185, p. 917, 1947.

*Thalattodora insignis* Perkins, Fauna Hawaiiensis, II, p. 146, 1900.

*Pentacotaster nagayamai* Chûjô et Voss, Mem. Fac. Liberal Arts & Education, Kagawa Univ., 2, p. 16, 1960. **Syn. nov.**

Specimens examined: 2 exs., Tagonoura, Shizuoka-ken, 26. IX. 1961, from driftwood of a pine washed ashore, K. Morimoto leg.; 2 exs., Okazaki, Aichi-ken, 1. V. 1953, Y. Suzuki leg.; 10 exs., Ako, Miyake-jima, Izu Islands, 17. VIII. 1936, H. Yuasa leg.; 1 ex., Hachijô-jima, Izu Islands, 30. VII. 1948, M. Konishi leg., 1 ex., same locality, 10. VIII. 1949, K. Umeya leg.; 1 ex., Nakano-shima, Tokara Islands, 25. V. 1953, T. Nakane leg.; 2 exs., Yamma,

Amami-Oshima, Amami Islands, VI & VII. 1960, reared from rotten wood, N. Hayashi leg.

Distribution: Japan\* (Honshu; Miyake-jima & Hachijō-jima, Izu Islands; Nakano-shima, Tokara Islands; Amami-Oshima, Amami Islands); Ryukyu Islands (Ishigaki Is. & N. Borodino Is.); Wake Is.; Hawaiian Islands; Australia; Galápagos Islands; West Indies; Florida, U.S.A.

Having examined the present specimens at hand I have come to the conclusion that *Pentacotaster nagayamai* Chûjō et Voss should be sunken as a synonym of *Dryotribus mimeticus* Horn. In this species the prothorax is rather variable in form, its lateral margins being arcuate in usual, but sometimes subparallel-sided.

Genus *Isodryotribus*, gen. nov.

Elongate-ovate, coarsely sculptured, opaque, incrustate, setose.

Head globose, much broader than long, not constricted behind eyes, interocular area a little narrower than base of rostrum; eyes rather coarsely faceted, prominent, slightly more broadly separated below than above, separated from prothorax by more than length of eye. Rostrum elongate, subcylindrical in dorsal view, curved in lateral view; scrobes oblique, passing downwards well below eyes, but not convergent below. Scape not reaching to hind margin of eye, clavate, slightly longer than funicle; funicle 5-segmented, segment I longer than any of the following segments which are successively broader; club oval, pubescent. Prothorax constricted near base and apex, truncate at base. Scutellum not visible. Elytra elongate-ovate, without projecting humeri, subtruncate at base, coarsely punctate-striate. Femora clavate; tibiae strongly uncinat and evidently mucronate; tarsal segment III much broader than II, deeply bilobed at apex. Fore coxae narrowly separated; mesosternum slightly below level of metasternum, mesosternal process much broader than prosternal one, but narrower than middle coxa; hind coxae separated for length of metasternum between middle and hind coxae. Intercostal process of venter truncate; ventrites I and II fused and equal in length at sides, III and IV equal in length and together shorter than V.

Type species: *Isodryotribus squamosus*, sp. nov.

This genus is closely related to *Dryotribus* Horn, but differs from the latter in having the shorter head which is not constricted behind the eyes and the shorter scape.

1. *Isodryotribus squamosus*, sp. nov. (Pl. I, Fig. 2)

Piceous, opaque; head, rostrum and legs a little tinged with red; antennae, tarsi and tibial unci reddish brown; setae pale, conspicuous above; derm reticulate, with greasy partial incrustation.

Head  $3/5$  as long as broad, roundly narrowed to eyes, shallowly and reticulately punctate anteriorly; eyes nearly round, moderately prominent. Rostrum about as long as prothorax, a little narrowed anteriorly near base, subparallel-sided to antennae, thence slightly widened to apex, the apical breadth as broad as basal one, moderately arcuate in lateral view; dorsum shallowly and densely punctate on basal  $1/3$ , the punctures finer anteriorly; antennae inserted at middle. Scape reaching to middle of eye in lateral view; funicular segment I twice as long as broad, II longer than broad ( $3:2$ ) and longer than III ( $3:2$ ), III-V each about as

\*) This indicates a new record of habitats or host plants.

long as broad; club about as long as the preceding 3 segments combined. Prothorax as long as broad, broadest behind middle, feebly arcuate from near base to deep subapical constriction which is traceable across the dorsum; dorsum coarsely and reticulately punctate, the punctures with short and stout setae. Elytra 1.8 times as long as broad, 2.4 times as long as prothorax, slightly narrower at base than the broadest part of prothorax (3.4:3.7), broadest at middle, gently arcuate from base to apex, with a feeble subapical constriction, jointly rounded at apex; striae with close and large punctures, much broader than intervals; intervals obtusely granulate throughout, with a row of spatulate and suberect setae, interval IX not carinate posteriorly and ending at apex of III. Tarsal segment I slightly longer than II, II about as long as broad, III distinctly longer and broader than II. Prosternal process a little narrower than apical breadth of tarsal claw segment; mesosternal process  $1/2$  as broad as middle coxa. Length, 2.2 mm.; breadth, 0.9 mm.

Holotype: Takara-jima, Tokara Islands, 30. V. 1953, S. Miyamoto leg. (TN).

Distribution: Japan (Takara-jima, Tokara Islands).

#### Genus *Microtribus* Wollaston

*Microtribus* Wollaston, Trans. Ent. Soc. Lond., pp. 435, 451 & 522, 1873.

Type species: *Microtribus huttoni* Wollaston, 1873.

#### 1. *Microtribus splendidus*, sp. nov. (Pl. I, Fig. 3)

Coal black, very shiny, with bronzy reflections; rostrum and legs piceous; antennae brown except club piceous.

Head roundly narrowed from base to eyes; vertex globose, finely alutaceous, moderately punctate, the punctures becoming larger and denser anteriorly; interocular area slightly narrower than base of rostrum, with a shallow median fovea; eyes somewhat prominent. Rostrum  $3/4$  as long as prothorax, parallel-sided from base to middle, thence somewhat widened towards apex, almost straight in basal  $1/2$  and feebly declivous anteriorly; dorsum rugosely punctate, the punctures longitudinally subconfluent or confluent in ♂, sparser in ♀; antennae inserted at middle. Scape reaching to middle of eye in lateral view; funicular segment II a little shorter than III plus IV; club oval, as long as the preceding 3 segments combined. Prothorax longer than broad (3.6:3.3), arcuately narrowed from base to apex, broadest at middle, feebly constricted near apex, the constriction not or hardly continued across dorsum; dorsum convex, densely and somewhat reticulately punctate, interspaces of the punctures finely alutaceous. Scutellum not visible. Elytra about twice as long as broad, 2.5 times as long as prothorax, a little broader across humeri than the broadest part of prothorax (3.5:3.3), gradually widened from base to basal  $2/3$ , thence arcuately narrowed to apex which is jointly rounded; striae with close punctures, a little broader than intervals on disc; intervals with a row of small punctures, interval IX ending at apex of III. Tarsal segment III much broader than II, deeply bilobed at apex. Prosternal process  $1/2$  as broad as fore coxa; mesosternal process as broad as middle coxa. Length, 2.2–2.5 mm.; breadth, 0.8–0.9 mm.

Holotype (♂): Koniya, Amami-Oshima, Amami Islands, 20. IV. 1954, T. Kumata leg. (HU). Paratype: 1 ♀, Sata-misaki, Kagoshima-ken, 9. VI. 1959, J. Nagao leg. (KU).

Distribution: Japan (Kyushu; Amami-Oshima, Amami Islands).

The coloration with bronzy reflections may serve to distinguish this species from its allies. Furthermore, the present species differs from *Microtribus longiceps* Marshall, 1931, by the following points: head globose on vertex; prothorax feebly constricted near apex; elytra broader across humeri than the broadest part of prothorax, with intervals punctate.

### Tribe **Himatinini**, m.

The principal character of the present tribe lies in the eyes which are ventro-lateral, close to or contiguous with the prothorax and always depressed. This tribe is established for the first time for the genera *Himatinum* Cockerell, 1906, *Chaerodemas* Faust, 1898, *Ochronanus* Pascoe, 1885, *Isochronanus* Voss<sup>1)</sup>, 1957, *Pholidonotus* Wollaston, 1873, *Cop-torhamphus* Wollaston, 1873 and *Macrohimatinum*, gen. nov. Although the first 4 genera are placed in the subtribe Stereocorynina of the tribe Rhyncolini by Voss (1957), the present arrangement is preferable to that of Voss. The following 3 genera are known to occur in Japan.

### Key to the genera

1. Body conspicuously setose above; prosternal process more than 1/2 as broad as fore coxa; mesosternal process more than 1/2 as broad as middle coxa; scape just reaching to fore margin of eye in lateral view. . . . . 2.
- Body almost glabrous above; prosternal process less than 1/2 as broad as fore coxa; mesosternal process 1/2 as broad as middle coxa; scape not reaching to fore margin of eye in lateral view. . . . . *Ochronanus* Pascoe.
2. Body fusiform, subdepressed above; tarsal segment III subtruncate at apex. . . . . *Himatinum* Cockerell.
- Body subcylindrical, rather convex above; tarsal segment III deeply bilobed at apex. . . . . *Macrohimatinum*, gen. nov.

### Genus **Himatinum** Cockerell

*Himatinum* Cockerell, Ent. News, 17, p. 243, 1906.

*Himatium* Wollaston, Trans. Ent. Soc. Lond., pp. 436, 461 & 542, 1873 (nec Clark).

Type species: *Himatium pubescens* Wollaston, 1873.

### Key to the species

1. Brown to dark brown; pronotum rather convex, discal punctures subequal in form and size; mesosternal process not broader than middle coxa; in ♀, rostrum at most 2.5 times as long as broad. . . 2.
  - Dark brown to piceous; pronotum flat, discal punctures irregular in form and size; mesosternal process broader than middle coxa; in ♀, rostrum thrice as long as broad. . . *morimotoi*, sp. nov.
  2. Prosternal process as broad as fore coxa; mesosternal process as broad as middle coxa; in ♀, rostrum with a strong transverse impression at base. . . . . *ichihashii*, sp. nov.
  - Prosternal process narrower than fore coxa; mesosternal process narrower than middle coxa; rostrum without such basal impression in both sexes. . . . . *piceae*, sp. nov.
1. ***Himatinum piceae***, sp. nov.

Brown to dark brown, rather shiny; club and tarsi yellowish brown; scutellum and basal

1) Originally described as a subgenus of *Himatinum* Cockerell.



margin of elytra black; setae pale.

Head with fine punctures. Rostrum almost parallel-sided in dorsal view, straight from base towards apex and feebly declivous near apex in lateral view; in ♂, twice as long as broad,  $3/5$  as long as prothorax, dorsum densely punctate, the punctures longitudinally subconfluent or confluent and forming an indefinite median sulcus from base to or behind middle; in ♀, somewhat narrower, 2.5 times as long as broad, dorsum with finer punctures, median sulcus sometimes subobsolete; setae subclavate and suberect, 2 basal ones much longer than the others; antennae inserted at middle in ♂ and a little behind middle in ♀. Prothorax longer than broad (4.2:3.6), broadest at basal  $1/4$ , thence narrowed to base and arcuately narrowed to rather shallow subapical constriction; dorsum with a shallow impression from behind middle to near apex, so that the subapical area seems to be raised, densely punctate, the punctures subequal in form and size and much broader than their interspaces; setae on disc sharp and decumbent, lateral ones subclavate and subdecumbent, directed medially. Scutellum cordiform, glabrous, with a few minute punctures. Elytra slightly more than twice as long as broad, about twice as long as prothorax, about as broad across humeri as the broadest part of prothorax, parallel-sided from base to middle, thence arcuately narrowed to apex; striae with close elongate punctures, about as broad as intervals; intervals with a row of punctures bearing setae, the setae slender and decumbent on disc, spatulate and recurved laterally and posteriorly. Prosternal process distinctly narrower than fore coxa (5:8); mesosternal process a little broader than prosternal one (6:5), slightly narrower than middle coxa (6:8). Length, 2.1–2.4 mm.; breadth, 0.6–0.7 mm.

Holotype (♂): Chitose, Hokkaido, 13. IX. 1955, from *Picea jezoensis*, M. Konishi leg. (HU). Paratypes: 9 ♂♂ & 7 ♀♀, same as holotype (HU & MK); 1 ♂, Tarumae-san, Hokkaido, 5. VIII. 1954, M. Konishi leg. (HU).

Host plant: *Picea jezoensis* (Siebold et Zuccarini) Carrière.

Distribution: Japan (Hokkaido).

This species differs from *Himatium bisetosum* Zimmerman, 1942, in having the sparser punctures of pronotum and the narrower prosternal process.

## 2. *Himatium ichihashii*, sp. nov. (Fig. 1, A & B)

Closely related to *H. piceae*, sp. nov.

Rostrum, in ♂, 2.3 times as long as broad,  $3/5$  as long as prothorax, dorsum with a short median sulcus near base, rugosely punctate, the punctures longitudinally subconfluent or confluent; in ♀, of the same length and breadth, transversely impressed at base, so that being concave near the base in lateral view, with a deep median sulcus from base to near middle, dorsal punctures sparser; basal setae not longer than the others; antennae inserted at about middle. Prothorax longer than broad (4.6:3.8), broadest at basal  $1/5$ , thence narrowed to base and gradually narrowed to shallow subapical constriction which is traceable across the dorsum. Elytra about twice as long as broad, a little less than twice as long as prothorax, somewhat broader across humeri than the broadest part of prothorax (4.0:3.8), parallel-sided from base to slightly behind middle. Prosternal process about as broad as fore coxa; mesosternal process about as broad as prosternal one or middle coxa. Length,

2.5–2.8 mm.; breadth, 0.7–0.9 mm.

Holotype (♂): Hirakura, Mie Univ. Forest, Mie-ken, 11. V. 1956, H. Ichihashi leg. (HU).  
Paratypes: 1 ♀, same as holotype (HU); 2 ♂♂, Mie Univ. Forest, Mie-ken, 12. V. 1955, from *Fagus japonica*, H. Ichihashi leg. (HI & MK); 1 ♀, Miyanoura-gemba, Yakushima, 19. VII. 1952, Y. Kurosawa leg. (NSM).

Host plant: *Fagus japonica* Maximowicz.

Distribution: Japan (Honshu; Yakushima).

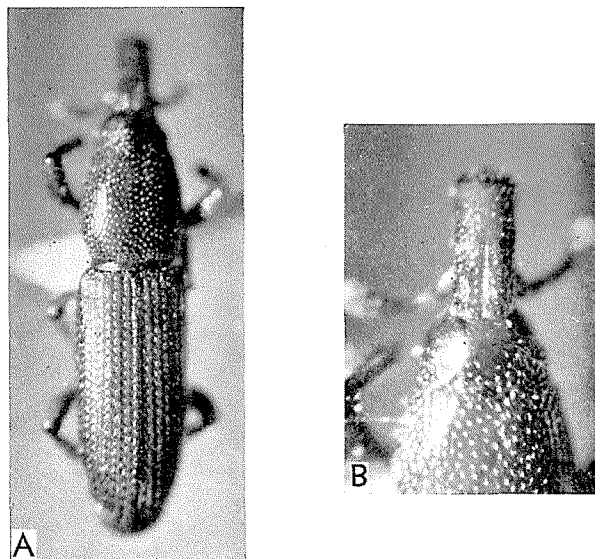


Fig. 1. *Himatinum ichihashii*, sp. nov.

A: Dorsal aspect of a female paratype (locality: Yakushima).

B: Rostrum of the same specimen, showing median sulcus.

### 3. *Himatinum morimotoi*, sp. nov.

Resembles closely the preceding 2 new species.

Dark brown to piceous; club and tarsi yellowish brown.

Rostrum, in ♂, 2.3 times as long as broad,  $\frac{3}{5}$  as long as prothorax, dorsum densely punctate, the punctures longitudinally confluent on basal  $\frac{1}{2}$ ; in ♀, slightly longer and narrower, about thrice as long as broad,  $\frac{3}{4}$  as long as prothorax, dorsal punctures finer; several basal setae clavate and much longer than the others; antennae inserted at about middle in ♂ and slightly behind middle in ♀. Prothorax longer than broad (5.0:4.0), broadest at basal  $\frac{1}{5}$ , thence narrowed to base and gradually narrowed to deep subapical constriction marked across dorsum; dorsum flat on disc, densely and subconfluently punctate, the punctures irregular in form and size, roughly of 2 types, one of which is much smaller than another. Elytra about twice as long as broad, twice as long as prothorax, a little broader across humeri than the broadest part of prothorax (4.2:4.0), parallel-sided from base to middle, thence gradually narrowed to apex; interval I scattered with minute punctures on disc, transversely sculptured posteriorly. Frosternal process a little narrower than fore coxa (7:8); mesosternal

process slightly broader than prosternal one (9:7) or middle coxa (9:7). Length, 2.2–2.5 mm.; breadth, 0.6–0.8 mm.

Holotype (♂): Hiko-san, Fukuoka-ken, 13–14. VI. 1957, K. Morimoto leg. (KM). Paratype: 1 ♀, Inunaki-yama, Fukuoka-ken, 25. VI. 1960, J. Nagao leg. (KU).

Distribution: Japan (Kyushu).

Genus *Macrohimatinum*, gen. nov.

Closely related to *Himatinum* Cockerell.

Subcylindrical, conspicuously setose above.

Head much broader than long; eyes depressed, oval, more narrowly separated below than base of rostrum in ventral view. Rostrum projecting from head at an angle with frons, parallel-sided in dorsal view, straight in lateral view. Scape reaching to fore margin of eye, shorter than funicle; funicle 7-segmented, segment I obconic, II–VII each transverse and broader successively; club oval, pubescent. Prothorax truncate at base. Scutellum distinct. Elytra subcylindrical, punctate-striate. Femora clavate; tibiae strongly uncinata; tarsi about as long as tibiae excluding unci, segment III broader than II and deeply bilobed at apex. Prosternal process about as broad as fore coxa; mesosternal process slightly broader than prosternal one. Intercoxal process of venter broader than that of mesosternum, broadly arcuate.

Type species: *Macrohimatinum reticulatum*, sp. nov.

This genus differs principally from *Himatinum* in having the tarsal segment III deeply bilobed at the apex.

1. *Macrohimatinum reticulatum*, sp. nov. (Pl. I, Fig. 4)

Dark brown to piceous, rather opaque; antennae, tarsi and tibial unci reddish brown; setae pale.

Head somewhat rugosely punctate anteriorly; eyes not so much convex as head. Rostrum almost parallel-sided in dorsal view, straight from base towards apex and feebly declivous near apex in lateral view; in ♂, 2.3 times as long as broad, 3/5 as long as prothorax, dorsum with a shallow median sulcus from base to behind middle, longitudinally rugose; in ♀, somewhat longer and narrower, 2.6 times as long as broad, 2/3 as long as prothorax, dorsum with a median sulcus as that of ♂, confluent punctate laterally, the punctures finer; basal area with several clavate setae, 2 of which are along the base; antennae inserted slightly behind middle. Club longer than broad (9:7), about as long as the preceding 5 segments combined. Prothorax longer than broad (5.5:5.1), broadest near base, narrowed to deep subapical constriction which is traceable across the dorsum; dorsum coarsely and reticulately punctate on disc, the punctures rather shallow and irregular in form and size; setae of 2 types, 1 type sharp and decumbent, mostly on disc, another subclavate and subdecumbent, directed medially. Scutellum cordiform, coarsely sculptured. Elytra twice as long as broad, 2.2 times as long as prothorax, broader across humeri than the broadest part of prothorax (6.3:5.2), parallel-sided from base to middle, thence gradually narrowed to apex, apices a little separately rounded, base narrowly marginate; striae with close and shallow punctures, much

narrower than intervals; intervals nearly flat, roughened throughout, with irregular or duplicate small punctures bearing spatulate and erect setae, intercalating slender and decumbent setae. Tarsal segment III much broader than II (3:2). Prosternal process about as broad as fore coxa; mesosternal process broader than prosternal one (5:4). Length, 3.1–3.3 mm.; breadth, 1.1–1.2 mm.

Holotype (♂): Osugi, Mie-ken, 11. VI. 1952, T. Kishii leg. (HU). Paratypes: 1 ♀, same as holotype (TN); 1 ♂, Mie Univ. Forest, Mie-ken, 11. V. 1955, H. Ichihashi leg. (MK).

Distribution: Japan (Honshu).

Genus *Ochronanus* Pascoe

*Ochronanus* Pascoe, Ann. Mus. Civ. Genova, (2) 2, p. 313, 1885.

Type species: *Ochronanus pygmaeus* Pascoe, 1885.

1. *Ochronanus pallidus* Marshall (Pl. I, Fig. 5)

*Ochronanus pallidus* Marshall, Tijdschr. Ent., 101, p. 99, 1958.

Yellowish brown to brown, rather shiny.

Head rather sparsely punctate on vertex, the punctures becoming denser anteriorly; interocular area about as broad as base of rostrum, with a shallow median fovea. Rostrum about twice as long as broad, 3/5 as long as prothorax, almost parallel-sided in dorsal view, arcuate in lateral view; dorsum densely punctate; antennae inserted at middle. Prothorax longer than broad (4.2:4.0), broadest near base, thence a little narrowed to base and gradually narrowed to shallow subapical constriction which does not extend across the dorsum; dorsum rather densely punctate, interspaces of the punctures finely radiate. Scutellum cordiform. Elytra 1.8 times as long as broad, 2.1 times as long as prothorax, broader across humeri than the broadest part of prothorax (4.8:4.0), parallel-sided from humeri to middle, thence arcuately narrowed posteriorly, rather deeply constricted near apex, jointly rounded at apex; striae rather deep, with subconfluent punctures excising margins of intervals, a little broader than intervals on disc; intervals with a row of small punctures, interval IX reaching to apex. Prosternal process about 1/4 as broad as fore coxa; mesosternal process about twice as broad as prosternal one. Length, 2.1–2.7 mm.; breadth, 0.8–1.0 mm.

Specimens examined: 30 exs., Tarumae-san, Hokkaido, 6. VIII. 1954, 30 exs., same locality, 13. VIII. 1954, from *Picea jezoensis*, M. Konishi leg.; 2 exs., Chitose, Hokkaido, 27. VII. 1955, 2 exs., same locality, 18. VIII. 1955, 11 exs., same locality, 13–14. IX. 1955, from *Picea jezoensis*, M. Konishi leg.; 2 exs., Shikotsu-kohan, Hokkaido, 25–26. VIII. 1957, M. Konishi leg.; 1 ex., Tomakomai, Hokkaido, 23. IX. 1959, from *Picea excelsa*, M. Inouye leg.; 1 ex., Nopporo, Hokkaido, 29. X. 1957, M. Konishi leg.; 2 exs., Engaru, Hokkaido, 11. VIII. 1955, K. Morimoto leg.; 50 exs., Rishiri-tô, Hokkaido, 21–22. VII. 1951, from *Picea jezoensis*, M. Konishi leg.; 1 ex., Kurokawa-mura, Niigata-ken, 8. VII. 1955, from *Pinus* sp., K. Baba leg.; 3 exs., Tsurugi-san, Tokushima-ken, 26 VII. 1935, I. Ôkubo leg.; 2 exs., Shikoku (no exact locality), 18. X. 1938, from *Pinus densiflora*, T. Sawamoto leg.; 1 ex., Ishizuchi-yama, Ehime-ken, 13. VII. 1953, H. Hattori leg.; 1 ex., Tosa-yama, Kôchi-ken, 9. IV. 1956, from *Pinus densiflora*, K. Morimoto leg.; 1 ex., Nakano-shima, Tokara Islands, 4. VI. 1953, T. Nakane leg., 1 ex., same locality, 12. VI. 1953, S. Uéno leg.; 1 ex., Hentona, Okinawa Is.,

Ryukyu Islands, 19. VI. 1953, T. Shiraki leg.

Host plants: *Picea jezoensis* (Siebold et Zuccarini) Carrière\*; *Picea excelsa* Link\*; *Pinus densiflora* Siebold et Zuccarini\*.

Distribution: Japan (Hokkaido\*; Rishiri-tô\*, Hokkaido; Honshu\*; Shikoku\*; Nakano-shima\*, Tokara Islands); Ryukyu Islands\* (Okinawa Is.).

In Marshall's key to the species of *Ochronanus*, the present specimens run straight to *Ochronanus pallidus* Lewis, agreeing all the characters cited. However, Marshall (1958) uses the name, transferring from "*Rhyncolus pallidus* Lewis", but Lewis has never published it. Accordingly, the author of *O. pallidus* is, in reality, Marshall himself. In this paper I prefer to use the name *O. pallidus* Marshall, 1958, for this species, and yet there is room for doubt, I think, whether the name is published in a way that satisfies the criteria of availability in the International Code of Zoological Nomenclature or not. Furthermore, Marshall gives no more definite habitat of this species than Japan.

### Tribe **Stereocorynini**

The present tribe is essentially characterized by the almost contiguous fore coxae and the narrowly separated middle coxae in combination with the mesosternum which is strongly depressed below the level of the metasternum. The genera *Stereocorynes* Wollaston, 1873, *Hexarthrum* Wollaston, 1860, *Tomolips* Wollaston, 1873, *Brachytemnus* Wollaston, 1873, *Calyciforus* Wollaston, 1873, *Eurycorynes* Wollaston, 1873, *Stenoscelis* Wollaston, 1861, *Inosomus* Hutton, 1904, *Stenoscelodes*, gen. nov., etc. may belong to this tribe. The following 3 genera are known to occur in Japan.

### Key to the genera

1. Funicle 6-segmented; scutellum not immersed. . . . . *Hexarthrum* Wollaston.
- Funicle 7-segmented; scutellum deeply immersed below interval II of elytra. . . . . 2.
2. Intervals of elytra always granulate posteriorly; stria I close to scutellum. . . . . *Stenoscelis* Wollaston.
- Intervals of elytra never granulate posteriorly; stria I distant from scutellum. . . . . *Stenoscelodes*, gen. nov.

### Genus **Hexarthrum** Wollaston

*Hexarthrum* Wollaston, Ann. Mag. Nat. Hist., (3) 5, p. 448, 1860; Voss, Mitt. Münchn. Ent. Ges., 44/45, pp. 233 & 235, 1955.

Type species: *Hexarthrum compressum* Wollaston, 1860.

= *Cossonus culinaris* Germar, 1824.

This genus is treated by Reitter (1898)<sup>1)</sup>, Hoffmann (1954)<sup>2)</sup>, etc. as a subgenus of *Rhyncolus* Germar.

#### 1. **Hexarthrum brevicorne** Wollaston

*Hexarthrum brevicorne* Wollaston, Trans. Ent. Soc. Lond., p. 38, 1873; Lewis, Cat. Col. Jap. Archip., p. 24, 1879; Schönfeldt, Cat. Col. Jap., p. 154, 1887.

1) Reitter, Verh. Naturf. Ver. Brünn. 37, p. 14, 1898.

2) Hoffmann, Faune de France, 59, p. 762, 1954.

*Rhyncolus (Hexarthrum) brevicorne*: Winkler, Cat. Col. reg. palaearc., 13, 1532, 1932.

*Rhyncolus (Hexarthrum) brevicornis*: Csiki, in Junk, Col. Cat., 149, p. 185, 1936.

Specimen examined: 1 ex., Nagoya, Aichi-ken, 1-3. VII. 1947, T. Nakane leg.

Distribution: Japan (Honshu).

### Genus *Stenoscelis* Wollaston

*Stenoscelis* Wollaston, Jour. of Ent., 1, p. 141, 1861; Voss, Mitt. Münchn. Ent. Ges., 44/45, pp. 233 & 236, 1955.

*Dendroctonomorphus* Wollaston, Trans. Ent. Soc. Lond., pp. 440, 502 & 591, 1873.

Type species: *Stenoscelis hylastoides* Wollaston, 1861.

### Key to the species

1. Upper margin of scrobe directed towards slightly below middle of eye; setae on elytral declivity much longer than conical granules. . . . . 2.
- Upper margin of scrobe on a level with lower margin of eye; setae on elytral declivity not or but little longer than conical granules. . . . . *gracilitarsis* Wollaston.
2. Apices of elytra jointly rounded. . . . . 3.
- Apices of elytra separated, each with a small process. . . . . *aceri*, sp. nov.
3. Intervals of elytra with a row of granules on disc. . . . . *longisetosus* Konishi.
- Intervals of elytra with a row of punctures on disc. . . . . *cryptomeriae*, sp. nov.

#### 1. *Stenoscelis gracilitarsis* Wollaston

*Stenoscelis gracilitarsis* Wollaston, Trans. Ent. Soc. Lond., p. 42, 1873; Lewis, Cat. Col. Jap. Archip., p. 24, 1879; Schönfeldt, Cat. Col. Jap., p. 154, 1887; Winkler, Cat. Col. reg. palaearc., 13, 1533, 1932; Csiki, in Junk, Col. Cat., 149, p. 194, 1936; Marshall, Proc. R. Ent. Soc. Lond., (B) 6, p. 56, 1937; Konishi, Ins. Mats., 19, p. 110, 1956.

Specimens examined: Exs. (see: Konishi, 1956); 1 ex., Jubusen, Kyoto, 24. II. 1952, T. Horio leg.

Host plants: *Pinus Thunbergii* Parlatore; *Pinus densiflora* Siebold et Zuccarini.

Distribution: Japan (Honshu; Miyake-jima, Izu Islands; Shikoku; Kyushu).

#### 2. *Stenoscelis longisetosus* Konishi

*Stenoscelis longisetosus* Konishi, Ins. Mats., 19, p. 110, 1956.

Specimens examined: Types of *longisetosus* (see: Konishi, 1956); 1 ex., Mie Univ. Forest, Mie-ken, 10. VI. 1958, H. Ichihashi leg.; 1 ex., Akaishi-yama, Ehime-ken, 8. VII. 1956, M. Chûjô leg.

Distribution: Japan (Hokkaido; Honshu; Shikoku\*).

#### 3. *Stenoscelis cryptomeriae*, sp. nov.

Light brown (probably in young adults), rather shiny; head and rostrum darker; setae pale.

Head rather densely punctate on vertex, the punctures becoming denser anteriorly; interocular area with a small median fovea; eyes hardly more convex than head. Rostrum broader than long (5:3), a little narrowed from base to apex; dorsum densely punctate; upper margin of scrobe directed towards lower 1/3 of length of eye. Prothorax broader than long (5.0:

4.3), subcylindrical, broadest near base, thence rapidly narrowed to base and somewhat narrowed towards apex, slightly sinuate behind middle, deeply constricted near apex, the constriction hardly extending across dorsum, apical margin slightly sinuate in middle; dorsum densely punctate, the punctures longitudinally subconfluent laterally. Scutellum cordiform. Elytra 1.8 times as long as broad, 2.3 times as long as prothorax, broader across humeri than the broadest part of prothorax (5.5:5.0), subcylindrical, slightly widened posteriorly, jointly rounded at apex; striae with close and subrectangular punctures, about as broad as intervals on disc, stria III not reaching to base; intervals rather convex, with a row of distant punctures on disc, the punctures replaced by small conical granules on apical 1/3, interval I gradually narrowed towards base, II-IV united and rugosely granulate near base, IX carinate posteriorly and ending as usual at apex of III; setae on declivity long and erect, more than twice as long as adjacent conical granules. Length, 2.3-2.5 mm.; breadth, 0.9-1.0 mm.

Holotype: Kobotoke-tôge, Asakawa, Tokyo, 5. VI. 1948, from *Cryptomeria japonica*, N. Hayashi leg. (HU). Paratype: 1 ex., same as holotype (MK).

Host plant: *Cryptomeria japonica* (Linné, fil.) D. Don.

Distribution: Japan (Honshu).

4. *Stenoscelis aceri*, sp. nov.

Black, shiny; elytra and legs a little tinged with red; antennae, tarsi and tibial unci light brown; setae pale, conspicuous on elytral declivity.

Head moderately punctate on vertex; interocular area with denser and larger punctures, median fovea inconspicuous; eyes hardly more convex than head. Rostrum slightly less than twice as broad as long, feebly narrowed from base to apex; dorsum with dense punctures which are sometimes longitudinally subconfluent; upper margin of scrobe directed towards lower 1/3 of length of eye. Prothorax broader than long (4.4:4.0), subcylindrical, subparallel-sided, broadest near base, shallowly and broadly sinuate on sides, deeply constricted near apex, the constriction not extending across dorsum, apical margin feebly sinuate in middle; dorsum with dense punctures which are denser laterally. Scutellum cordiform. Elytra 1.8 times as long as broad, 2.2 times as long as prothorax, broader across humeri than the broadest part of prothorax (4.6:4.4), subcylindrical, a little widened posteriorly, apices separately produced into a small process; striae with rather close punctures, a little narrower than intervals on disc, stria III not reaching to base; intervals somewhat convex, with a row of distant fine punctures on disc and with small conical granules on apical 1/3, interval I not narrowed near base, II-IV united and rugose near base; setae on declivity long and erect, more than twice as long as adjacent conical granules. Length, 2.2-2.6 mm.; breadth, 0.8-0.9 mm.

Holotype: Maruyama, Sapporo, Hokkaido, 29. VII. 1956, from *Acer Mono*, M. Konishi leg. (HU). Paratype: 1 ex., same as holotype (MK).

Host plant: *Acer Mono* Maximowicz.

Distribution: Japan (Hokkaido).

This species is closely related to *Stenoscelis setosus* Marshall, 1937, but differs from the

latter in having the elytra which are widened posteriorly and the stria III which does not reach to the base of the elytra, etc.

Genus *Stenoscelodes*, gen. nov.

Very closely related to *Stenoscelis* Wollaston.

Head much broader than long, interocular area slightly narrower than base of rostrum; eyes depressed, oval. Rostrum broader than long, parallel-sided. Scape strongly clavate, shorter than funicle; funicle 7-segmented, segment I longer than any of the following segments which are transverse; club variable in size, densely pubescent. Prothorax broader than long. Scutellum deeply immersed, minute. Elytra subcylindrical; stria I not reaching to base; intervals broadly granulate near base, but not granulate posteriorly. Femora edentate; tibiae strongly uncinata and mucronate; tarsal segment III subtruncate at apex.

Type species: *Stenoscelodes hayashii*, sp. nov.

This genus differs principally from *Stenoscelis* in having the elytral intervals which are not granulate posteriorly.

Key to the species

1. Club distinctly shorter than funicle; striae of elytra smooth throughout; interval IX of elytra continued to apex and forming subapical margin. . . . . *hayashii*, sp. nov.
- Club distinctly longer than funicle; striae of elytra finely reticulate posteriorly; interval IX of elytra not continued to apex nor forming subapical margin, but ending at apex of interval III. . . . . *capitulus*, sp. nov.

1. *Stenoscelodes hayashii*, sp. nov.

Piceous to black, shiny; elytra lighter, tinged with red near base; antennae, tarsi and tibial unci reddish brown; setae inconspicuous above.

Head finely reticulate, densely punctate on vertex; interocular area with denser and larger punctures, without any definite median fovea; eyes hardly more convex than head. Rostrum twice as broad as long, parallel-sided; dorsum with longitudinally confluent punctures, the narrow interspaces somewhat rugose; upper margin of scrobe directed towards lower 1/3 of length of eye. Funicular segment I about as long as broad; club nearly round, somewhat compressed, as long as the preceding 6 segments combined. Prothorax broader than long (6.8:5.7), broadest near base, thence rapidly narrowed to base and gradually narrowed to shallow subapical constriction which does not extend across the dorsum, apical margin subtruncate; dorsum densely punctate, the punctures broader than their interspaces and denser laterally. Scutellum much smaller than adjacent punctures on pronotum. Elytra 1.7 times as long as broad, 2.3 times as long as prothorax, broader across humeri than the broadest part of prothorax (7.4:6.8), subcylindrical, slightly widened posteriorly, jointly rounded at apex; striae undulatingly incising margins of intervals posteriorly, striae I-IV not reaching to base, from which the distance becoming shorter successively, interspaces of punctures smooth throughout, the punctures much diminished in size posteriorly; intervals convex, with irregular or duplicate punctures except basal area, intervals I-V broadly united near base, area of the junction distinctly risen and set with rasp-like transverse granules, IX carinate



posteriorly, the carina continued to apex and forming subapical margin. Tarsal segment III deeply emarginate above. Mesosternal process as broad as length of middle tarsal segment III. Intercoxal process of venter arcuate, twice as broad as that of mesosternum. Length, 2.7–3.5 mm.; breadth, 1.2–1.6 mm.

Holotype: Okada, Izu-Oshima, Izu Islands, 5–6. VI. 1949, from *Euonymus Sieboldianus*, N. Hayashi leg. (HU). Paratypes: 20 exs., same data as holotype (HU), 8 exs., 31. VII. 1949, reared, same data as holotype (HU); 1 ex., Miyake-jima, Izu Islands, 18. VII. 1953, K. Umeza leg. (HU); 1 ex., Hachijō-jima, Izu Islands, 19. VII. 1957, S. Hisamatsu leg. (MC); 8 exs., Tokyo, 16. VI. 1914, from *Gleditsia japonica*, E. Gallois leg.; 3 exs., Ginza, Tokyo, 24. XII. 1948, from *Salix babylonica*, H. Hasegawa leg. (HU); 3 exs., Meguro, Tokyo, 10. IX. 1957, from *Sambucus Sieboldiana*, A. Nobuchi leg. (AN); 1 ex., Subashiri, Shizuoka-ken, 26. V. 1951, from *Aralia elata*, A. Nobuchi leg.; 1 ex., Date, Hokkaido, 7. IX. 1942, from *Alnus japonica*, M. Matsushita leg. (HU); 1 ex., Nanae, Hokkaido, 8. IX. 1943, 1 ex., same locality, 6. VII. 1944, from *Fagus crenata*, M. Inouye leg. (MI); 1 ex., Ashizuri-misaki, Kōchi-ken, 21. VII. 1957, K. Morimoto leg. (KM); 1 ex., Sata-misaki, Kagoshima-ken, 27. V. 1958, Y. Miyake leg. (KU).

Host plants: *Salix babylonica* Linné; *Alnus japonica* (Thunberg) Steudel; *Fagus crenata* Blume; *Gleditsia japonica* Miquel; *Euonymus Sieboldianus* Blume; *Aralia elata* (Miquel) Seemann; *Sambucus Sieboldiana* Blume.

Distribution: Japan (Hokkaido; Honshu; Izu-Oshima, Miyake-jima & Hachijō-jima, Izu Islands; Shikoku; Kyushu).

In the specimen collected at Sata-misaki, the elytral striae are rough on the declivity.

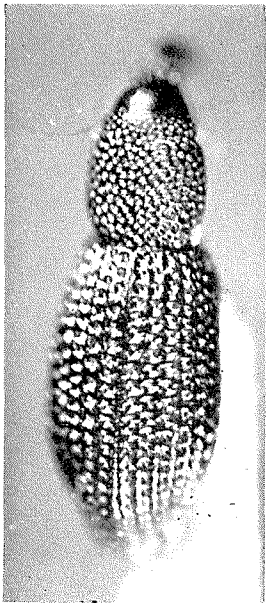
## 2. *Stenoscelodes capitulus*, sp. nov. (Pl. I, Fig. 6)

Black, rather shiny, elytra subopaque; antennae, tarsi and tibial unci reddish brown; setae pale, inconspicuous above.

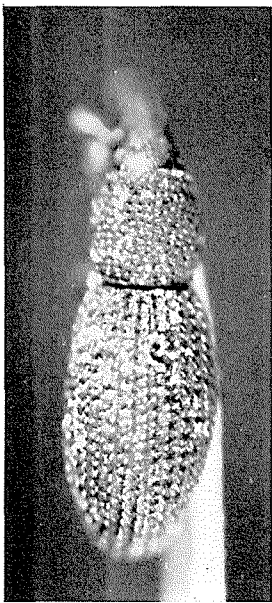
Head rather sparsely punctate on vertex, the punctures denser and larger anteriorly; interocular area with a distinct median fovea; eyes hardly more convex than head. Rostrum twice as broad as long, parallel-sided; dorsum rugosely punctate; upper margin of scrobe directed towards a little below middle of length of eye. Funicular segment I broader than long (4:3); club ovate, compressed, about as long as broad, distinctly longer than funicle (4:3). Prothorax broader than long (8.6:7.0), broadest near base, thence suddenly narrowed to base and gradually narrowed towards apex, slightly sinuate behind middle, with a rather deep subapical constriction which is not traceable across the dorsum, apical margin a little sinuate in middle; dorsum with a shallow indefinite impression on middle, rather sparsely

### Explanation of Plate I

- Fig. 1. *Dryotribus mimeticus* Horn (locality: Miyake-jima).  
 Fig. 2. *Isodryotribus squamosus*, sp. nov. (holotype).  
 Fig. 3. *Microtribus splendidus*, sp. nov. (holotype).  
 Fig. 4. *Macrohimatinum reticulatum*, sp. nov. (paratype, ♀).  
 Fig. 5. *Ochronanus pallidus* Marshall (locality: Chitose, Hokkaido).  
 Fig. 6. *Stenoscelodes capitulus*, sp. nov. (holotype).



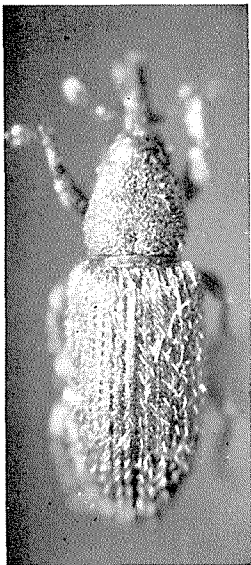
1



2



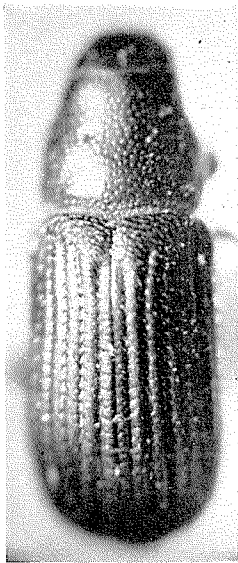
3



4



5



6

punctate, the punctures narrower than their interspaces and not denser laterally. Scutellum about as large as adjacent punctures on pronotum. Elytra 1.7 times as long as broad, 2.5 times as long as prothorax, broader across humeri than the broadest part of prothorax (9.5:8.6), subcylindrical, slightly widened posteriorly, jointly rounded at apex; striae undulatingly incising margins of intervals posteriorly, striae I-IV not reaching to base, interspaces of punctures finely reticulate posteriorly; intervals somewhat convex, with irregular or duplicate punctures except basal area granulate, IX carinate posteriorly and ending at apex of III. Length, 4.2 mm.; breadth, 1.7 mm.

Holotype: Fukuchi-yama, Kokura, Fukuoka-ken, 14. V. 1953, K. Morimoto leg. (KU).

Distribution: Japan (Kyushu).

—To be continued—

**ON THE GENUS DRYOPHTHOROIDES ROELOFS (Col.: Curc.).** In the following lines is given a note on *Dryophthoroides* belonging to the Rhynchophorinae, with a check list of the species.

Genus *Dryophthoroides* Roelofs

*Dryophthoroides* Roelofs, Ann. Soc. Ent. Belg., 22, C. R., p. liv, 1879. (Type: *Dryophthoroides sulcatus* Roelofs).

*Pembertonia* Zimmerman, Proc. Haw. Ent. Soc., 12, p. 202, 1944. (Type: *Pembertonia seftoni* Zimmerman). **Syn. nov.**

My own investigation has convinced me that *Pembertonia* should be sunken as a synonym of *Dryophthoroides*, since no definite differences could be found between them.

1. *Dryophthoroides parvungulis* Marshall

*Dryophthoroides parvungulis* Marshall, Ind. Forest Rec., 16, p. 270, 1931.

Distribution: Bengal.

2. *Dryophthoroides seftoni* (Zimmerman), comb. nov.

*Pembertonia seftoni* Zimmerman, Proc. Haw. Ent. Soc., 12, p. 203, 1944.

Distribution: New Guinea.

3. *Dryophthoroides sulcatus* Roelofs

*Dryophthoroides sulcatus* Roelofs, Ann. Soc. Ent. Belg., 22, C. R., p. liv, 1879; Lewis, Cat. Col. Jap. Archip., p. 24, 1879; Roelofs, Ann. Soc. Ent. Belg., 24, p. 25, 1880; Schönfeldt, Cat. Col. Jap., p. 153, 1887; Marshall, Ind. Forest Rec., 16, p. 271, 1931; Winkler, Cat. Col. reg. palaearc., 13, 1529, 1932; Csiki, in Junk, Col. Cat., 149, p. 81, 1936; Voss, Decheniana, 5, p. 130, 1958; Morimoto, Enumer. Ins. Mt. Hikosan, II, p. 86, 1959; M-T. Chûjô, Mikado, 1, p. 16, 1961.

Specimens examined: 2 exs., Suhara, Gifu-ken, 17. V. 1953, H. Hattori leg.; 1 ex., Nonobori-yama, Mie-ken, 23. XI. 1954, H. Ichihashi leg.; 1 ex., Okayama, Okayama-ken, 24. VII. 1939; 10 exs., Zozu-san, Kagawa-ken, 29. IV. 1960, from *Pinus densiflora*, M. Chûjô leg.; 2 exs., Koyadaira, Tokushima-ken, 9. VIII. 1913, E. Gallois leg.; 1 ex., Zaisho, Kôchi-ken, 2. VI. 1935, I. Ôkubo leg.; 2 exs., Kuishi-yama, Kôchi-ken, 28. III. 1954, from *Abies firma*, K. Morimoto leg.; 1 ex., Hirao, Fukuoka, Fukuoka-ken, 17. V. 1952, S. Kimoto leg.

Host plants: *Abies firma* Siebold et Zuccarini; *Pinus densiflora* Siebold et Zuccarini.

Distribution: Japan (Honshu; Shikoku; Kyushu; Tsushima); China.

MASAYASU KONISHI

**DISCOVERY OF SYNONMATUS INTERRUPTUS PASCOE IN JAPAN (Col.: Curc.).**

Through the courtesy of Dr. Y. Kurosawa in offering the material I will give Japan as a new locality of *Synommatus interruptus* which has been known to occur in Java and China.

*Synommatus interruptus* Pascoe

*Synommatus interruptus* Pascoe, Ann. Mus. Civ. Genova, Ser. II, 2, p. 311, 1885; Csiki, in Junk, Col. Cat., 149, p. 115, 1936; Voss, Decheniana, 5, p. 129, 1958.

Specimens examined: 4 exs., Kosugidani, Yakushima, 7 & 9. VII. 1952, Y. Kurosawa leg.

In the specimens examined the alternate elytral intervals, especially III and V, are elevated towards the apex.

MASAYASU KONISHI